

ABSTRACT OF THE DISCLOSURE

1 The field of view of a sensor mounted on a satellite (or other spacecraft) is
2 obscured by various objects, such as celestial bodies and the satellite's own solar panels.
3 A method is disclosed for visualizing and quantifying, with respect to time, variations in
4 the portions of the sensor's field of view that are obscured. The graphical output of a
5 satellite systems analysis program, which features high-resolution, three-dimensional,
6 animated images of spacecraft, celestial bodies and other objects in the space environment,
7 is utilized. The graphical output is simplified to only a few colors to differentiate only
8 background and irrelevant objects from relevant objects. Differentiation is also made,
9 using different colors, in representation of those portions of the field of view that overlap
10 relevant (obscuring) objects from the remainder of the field of view which is unobscured.
11 By counting pixels of the respective colors, frame-by-frame during animation, the
12 percentage of obscuration over time is quantified.